

a light source that is configured to expose the photochromic layer to light to adjust an opacity of the photochromic layer.

**12.** The head-mounted device defined in claim 11, further comprising:

a heating element that is supported by the head-mounted support structure and that is configured to heat the photochromic layer;

a first filter layer that is supported by the head-mounted support structure and that is configured to block the light from the light source, wherein the heating element is interposed between the first filter layer and the photochromic layer; and

a second filter layer that is supported by the head-mounted support structure and that is configured to block the light from the light source, wherein the waveguide is interposed between the second filter layer and the photochromic layer.

**13.** The head-mounted device defined in claim 11, wherein the light source is an ultraviolet light source.

**14.** The head-mounted device defined in claim 11, wherein the light source is configured to emit the light into an input coupler of the waveguide and wherein an output coupler of the waveguide is configured to direct the light towards selected portions of the photochromic layer.

**15.** The head-mounted device defined in claim 11, further comprising:

an additional waveguide, wherein the light source is configured to emit the light into an input coupler of the additional waveguide and wherein an output coupler of the additional waveguide is configured to direct the light towards selected portions of the photochromic layer.

**16.** The head-mounted device defined in claim 11, further comprising:

a front-facing camera supported by the head-mounted support structure; and

control circuitry configured to control the light source to adjust the opacity of the photochromic layer based on information from the front-facing camera.

**17.** The head-mounted device defined in claim 11, further comprising:

a gaze-tracking system supported by the head-mounted support structure; and

control circuitry configured to control the light source to adjust the opacity of the photochromic layer based on information from the gaze-tracking system.

**18.** A head-mounted device, comprising:

a head-mounted support structure;

a transparent display that is supported by the head-mounted support structure;

an adjustable opacity layer that is supported by the head-mounted support structure and that overlaps the transparent display, wherein the adjustable opacity layer has a plurality of adjustable opacity pixels; and  
an ultraviolet light source that selectively exposes the adjustable opacity layer to ultraviolet light to adjust each adjustable opacity pixel between an opaque state and a transparent state.

**19.** The head-mounted device defined in claim 18, wherein the transparent display comprises an optical coupler that is overlapped by the adjustable opacity layer and that is interposed between the adjustable opacity layer and a user.

**20.** The head-mounted device defined in claim 18, wherein the ultraviolet light source exposes each adjustable opacity pixel in the opaque state to the ultraviolet light and wherein the ultraviolet light source does not expose each adjustable opacity pixel in the transparent state to the ultraviolet light.

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